“Best Practices” for Preventing Adolescent Suicide: What Can We Learn from New Jersey?

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Background

- Since mid-1990s, MCHB has required states to report on a core set of performance and outcome indicators.
- Title V Information System (TVIS) compiles data on these indicators and makes it available at:

  https://performance.hrsa.gov/mchb/mchreports/index.asp.

Value of TVIS

When definitions are consistent and multiple years of data are available, individual states can judge their progress in improving health and compare their results with other states.

Core Performance Measure 16: The rate (per 100,000) of suicide deaths among youths aged 15 through 19.

National Data Available on Adolescent Suicide

Web-based Injury Statistics Query and Reporting System (WISQARS)

- Designed and maintained by the National Center for Injury Prevention and Control.
- Interactive database system that provides customized reports of injury-related data at the national and state-levels.
- Adolescent suicide data was taken from WISQARS for this presentation.
- Can be accessed at www.cdc.gov/ncipc/wisqars/

Coding of Adolescent Suicide (WISQARS): Comparison of ICD-9 and ICD-10 Codes

- ICD-9 Codes: E950-E959 (used prior to 1999)
- ICD-10 Codes: X60-X84 and Y87.0 (used starting in 1999)

Youth Risk Behavior Surveillance System (YRBSS)

- CDC survey of a nationally representative sample of students in grades 9-12 in the odd numbered years beginning in 1991.
- Over the years 26 (1991) to 41 (1999) states and 11 (1991) to 19 (2001) large cities have participated.
- Contains data on health-risk behaviors, including suicide attempts and carrying weapons in school.
- Data published for each year can be accessed by searching for “Youth Risk Behavior Surveillance” at www.cdc.gov/mmwr/mmwrsrch.htm.

Adolescent Suicide:
Extent of the Problem in the U.S.

Suicide: A Leading Cause of Death in 2000 for U.S. Adolescents Age 15-19

(CDC WISQARS Data, accessed 5/1/03)

	Total	White	Black	AmInd/ AKNat	Hispanic
Total	3rd	2nd	3rd	2nd	3rd
Male	3rd	2nd	3rd	2nd	3rd
Female	4th	3rd	5th	2nd	4th

2001 U.S. Adolescent Suicide Rate and Estimation of Attempt Rates

Adolescent Suicide Rate (Age 15-19) (WISQARS, accessed 12/1/03)	8.0/100,000
Percent High School Students Seriously Considering Suicide (YRBSS)	19.0%
Percent High School Students Making a Specific Suicide Plan (YRBSS)	14.8%
Percent High School Students Who Attempted Suicide at Least Once in Past 12 Months (YRBSS)	8.8%
Percent High School Students Requiring Treatment for Suicide Attempt (YRBSS)	2.6%

Adolescent Suicide: Trends in U.S. Data

- Historically, suicide rates are higher for males than females (CDC WISQARS data, accessed 12/1/03).
- American Indian/Alaskan Natives have the highest suicide rates followed by Whites, Hispanics, and Blacks (CDC WISQARS data, accessed 12/1/03).
- Females have higher rates than males for considering suicide and attempting suicide (CDC YRBSS data).

Adolescent Suicide: Trends in U.S. Data (continued)

- Suicide rates have been declining since mid-1990s, primarily for males and Whites. Female, Black, American Indian/Alaskan Native, and Hispanic rates have fallen to a lesser extent. (CDC WISCARS data, accessed 12/1/03).

Adolescent Suicide: Trends in U.S. Data (continued) Method by Sex

(CDC WISQARS Data, accessed 12/1/03)

	Firearms	**Suffocation**	**Poisoning**	**Subtotal**
Total (1991-2001)	64%	23%	8%	95%
Males (1991-2001)	67%	23%	5%	95%
Females (1991-2001)	48%	25%	20%	93%

Adolescent Suicide:
Review of the Literature

Risk Factors for Adolescent Suicide

- Psychopathology, including depression and substance abuse
- Childhood physical abuse
- History of a prior attempt
- Living in a less densely populated area

Promising Interventions in Schools

- Awareness curricula
- Problem-solving, coping, and cognitive skills training
- Screening programs
- Gatekeeper training

Promising Community Interventions

- Firearms restrictions
- Media training

Promising Clinical Intervention

- Although not evaluated for teenagers, the rate of prescribing antidepressants to teenagers is high and has probably led to some of the decline in adolescent suicide rates.

Barriers to Adolescent Suicide Prevention

- Stigma
- Cost
- Fragmentation of services

Recommendations for Adolescent Suicide Prevention Programs

(O'Carroll and colleagues at CDC in 1994)

- Ensure linkages with professional mental health resources in the community.
- Avoid reliance on one prevention strategy.
- Incorporate promising but underused strategies (i.e., firearms restrictions).
- Evaluate the program.

Why Was New Jersey Picked to Look at Adolescent Suicide Prevention Interventions?

Adolescent Suicide Rates per 100,000 (age 15-19): Comparison of Nine “Urban” States

(CDC WISQARS data, accessed 12/1/03, *< 20 deaths)

	1996	1997	1998	1999	2000	2001
NJ	3.5*	4.5	3.9*	3.4*	5.3	3.6*
CA	8.3	6.9	6.3	4.5	5.3	4.6
NY	5.6	5.6	5.2	4.9	5.5	5.4
FL	7.8	7.4	9.2	6.7	5.8	6.8
IL	6.2	6.2	7.4	6.6	6.0	7.1
OH	5.7	7.4	8.4	6.5	7.3	7.1
TX	11.0	12.0	9.3	7.5	9.4	7.8
PA	11.3	8.1	7.3	7.8	7.4	8.0
MI	8.6	10.7	8.1	8.5	6.8	8.8

Adolescent Suicide Rates per 100,000 (age 15-19): Comparison of Nine "Urban" States (1991-2001)

(CDC WISQARS data, accessed 12/1/03, *< 20 deaths)

	NJ	CA	NY	FL	IL	OH	TX	PA	MI
Males	6.8	11.1	9.7	13.2	12.2	13.9	17.0	14.0	16.1
Females	2.1	2.9	1.9	3.0	2.8	2.3	3.8	2.6	2.9
Whites	4.8	7.6	6.7	9.4	7.8	8.5	11.3	8.7	9.5
Blacks	4.0	6.1	4.0	4.9	7.8	7.4	7.6	7.1	10.1
Hispanics	3.1	5.5	3.6	5.3	6.6	6.8*	8.8	6.3	8.6

Adolescent Suicide Rates per 100,000 (age 15-19): Comparison of Ten Most Densely Populated States

(CDC WISQARS data accessed 12/1/03)

	Adolescent Suicide Rate (1991-2001)	**Average Persons/Square Mile (2000 Census)**
NJ	4.5	1,134.4
RI	5.9	1,003.2
MA	6.4	809.8
CT	7.4	702.9
MD	7.3	541.9
NY	6.1	401.9
DE	6.3	401.1
FL	8.4	296.4
OH	8.2	277.3
PA	8.6	274.0

Adolescent Suicide Prevention Activities in New Jersey

Multi-Disciplinary Suicide Prevention Team Takes the Lead in New Jersey

- Title V
- Department of Education
- Division of Mental Health
- University of Medicine and Dentistry of New Jersey (NMDNJ)
- Rutgers University
- American Foundation for Suicide Prevention-NJ Chapter
- Local traumatic loss coalitions
- Family members of adolescents who have committed suicide
- Two members of this team have worked on adolescent suicide prevention for the past 23 years.

New Jersey is a Member of the Northeast Injury Prevention Network

- Started in 1995
- Volunteer public health organization fostering inter-state collaboration
- States included: CT, ME, MA, NH, NJ, NY, RI, and VT
- Title V provides the NJ representative
- Published a *Suicide Databook* in 2000
- Suicide Prevention Plan was developed for NJ

Surveillance

- MCH Epidemiology Unit, Division of Family Health, NJ Department of Health and Senior Services takes the lead in pulling together data for surveillance.
- Physician county medical examiners determine the causes and manner of death for all violent, suspicious, and unusual deaths.

Regulatory Interventions and State Statutes

- First gun law restricting access to guns by minors in NJ passed in 1979.
- Program for Youth Suicide Prevention Projects was established in 1985.
- Psychiatric Screening Centers, including crisis hot lines, were mandated in every county in 1989.
- Childproof Handgun Bill was passed in 2000.
- As of 2001, Emergency and Crisis Management Plans were required in the schools.

New State Statute: Youth Suicide Prevention and Reporting Program

- Start a youth suicide attempt reporting system.
- Identify and provide suitable intervention services.
- Educate youth and families at risk about suicide prevention and intervention resources.
- Establish the NJ Youth Suicide Prevention Advisory Council to identify needs and advise the Division of Youth Suicide Reporting, Prevention, and Intervention in the Department of Human Services.

Interventions in the Schools

- Princeton Center for Leadership Training has sponsored school-based programs since 1979 that could impact on adolescent suicide. Some examples include programs to help incoming high school students adjust to a new environment, enable adolescents to develop critical skills necessary to make healthy life decisions, help middle school students develop leadership capacity and reduce substance abuse, and help parents improve communication with their children.

Interventions in the Schools (continued)

- In the 1980s two comprehensive universal school-based youth suicide prevention programs were developed and implemented in a number of NJ schools (Lifelines/Kalafat, Underwood, and Elias and Adolescent Suicide Awareness Program/Ryerson).
- Also in the 1980s a Social Decision Making and Problem Solving Program/Elias provided a social problem-solving curriculum to a number of NJ grade schools.

Interventions in the Schools (continued)

- The NJ Adolescent Suicide Prevention Project, conceived in 1985 at the University Behavioral Healthcare Department, UMDNJ was started to evaluate the effectiveness of school-based programs for adolescent suicide awareness and make recommendations for statewide programming. A manual, *Managing Sudden Traumatic Loss in the Schools*, was written to assist schools in handling the aftermath of a suicide. Since 1996 over 12,500 have been distributed nationwide.

Interventions in the Schools (continued)

- In 1987 the School Based Youth Services Program was initiated to help adolescents finish their education, obtain the skills they would need in the job market or in further education, and graduate from high school healthy and drug free. There is at least one site in every county.
- In the early 1990s, the Columbia TeenScreen Program/Shaffer, a screening program to identify and refer teens at risk for suicide, was pilot-tested in several NJ schools.

Interventions in the Community

- In operation since 1989, Covenant House of New Jersey provides services (crisis intervention, vocational/educational training, legal service, pastoral care, etc.) to homeless children in Newark and Atlantic City.
- Traumatic Loss Coalitions, started in 1995 in Mercer County, are now in all NJ counties to develop a coordinated response to traumatic loss events and crises affecting youth.

Interventions in the Community (continued)

- In 1998, Postvention to Individuals and Families Bereaved by Suicide was started and a local chapter the the American Foundation for Suicide Prevention was formed. As part of their activities, survivors in families who have experienced a suicide provide support and information on support groups for family members of suicide victims.

Interventions in the Community (continued)

- In response to the 9/11 crisis, Project Phoenix and the Families GOALS (Going on After Loss) were started to support families impacted by the event. Clinical mental health support is available as well as family support services.

Medical Student Training

- The Robert Wood Johnson Medical School, UMDNJ now involves a mother whose son committed suicide in college as part of their training for second-year medical students.

Conclusions

- NJ has had interventions in place for over 20 years that could have impact on adolescent suicide (i.e. gun restriction laws, county Psychiatric Screening Centers, the Princeton Center for Leadership Training programs, and suicide awareness curricula in a large number of schools).
- The programs to address adolescent suicide are diversified, multi-organizational and collaborative.
- Although some of the training programs in the schools have been evaluated separately, there has never been a coordinated evaluation of the interventions.

Contact in New Jersey

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